

ASSOCIATION OF PRE-TEST KNOWLEDGE SCORE REGARDING BREAST SELF- EXAMINATION WITH SELECTED SOCIO DEMOGRAPHIC VARIABLES IN SELECTED HOSPITALS OF PATIALA

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ABSTRACT

Breast Self-Examination is an important, cheap & easy method for early diagnosis of Breast Cancer. Carcinoma of the breast is an important public health problem with its associated high morbidity & mortality. Current reports indicate that cancer of the breast is the commonest malignancy in females affecting more than one million females annually, with an increasing incidence as the women presumably adopt a western life style.

Setting and Design: The study was conducted at Government hospital, Patiala, Punjab. The reason for selecting these schools was investigator's convenience and expected cooperation from authorities in getting permission for conducting the study. The population of the study was female nurses. Target population of the study consisted of nurses from Government hospital, Patiala, Punjab. Investigator selected a sample of 500 nurses by using convenient sampling technique from selected Government Hospital, Patiala, and Punjab. **Results:** The difference between pre test and post test mean knowledge score was found statistically significant at $p < 0.01$ level by 't' test. The relationship of pre-test and post-test mean knowledge Score among the nurses according to age was found statistically significant at $p < 0.01$ level by ANOVA.

Keywords: Carcinoma, malignancy, morbidity, mortality, presumably.

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INTRODUCTION

According to Indian report around one lakh cases of breast cancer are detected every year. 1 in 15 women is expected to be diagnosed with this malignant disease in her life time. Breast self- exam, or regularly examining your breasts on your own, can be an important way to find a breastcancer early, when it's more likely to be treated successfully. While no single test can detect all breast cancers early, Breastcancer.org believes that performing breast self-exam in combination with other screening methods can increase the odds of early detection. **Sameer 2019. Demirkiran F et al 2007** conducted a study to find out how do nurses and nurses perform breast self-examination: are they reliable sources of information? The sample was 289 women (125 nurses and 164 nurses). Breast Self-Examination to be performed monthly beginning at the age of 20 years and Clinical Breast Self-Examination annually beginning at age of 18 years. **Salaudeen AG et al 2009**. The important resources of dissemination of breast cancer knowledge to women are the healthcare professionals, educational institutions and media. **Ahmed F et al 2006**. Mortality is decreased by about 30% for women between 50 & 69 who undergo regular screening. **Burke L 2000**.

REVIEW OF LITERATURE

Parajuli P and Mandal GN 2010 also conducted a descriptive cross sectional study to assess the Knowledge about Breast Cancer and Breast Self-Examination Practices among Medical, Dental and B.Sc. Nursing Students. The survey was conducted among 220 graduate levels female students. Knowledge was less among BDS students whereas, it was found quite higher in MBBS and B.Sc. nursing students. Similarly, mean practice in relation to breast self-examination was found to be low in BDS, high in B.Sc. nursing, and higher in MBBS students. The results of the study revealed that overall level of knowledge was found to be mordantly adequate among all disciplines, however practices among them were found to be inadequate. Thus, it was concluded that the knowledge on breast cancer and practices should be included in the curriculum of the students.

Jaradeen KN 2010 did survey to evaluate the level of knowledge of breast cancer risk factors and breast self-examination practiced among Jordanian women. The total sample was 151 women. The subjects had low mean level knowledge about breast cancer risk factors. He found good knowledge of Breast Self-Examination, 91.4% heard of Breast Self-Examination, 73.5% knew the time of performing it, 71% knew the frequency and 65% knew the method to perform Breast Self-Examination and 39% practice Breast Self-Examination monthly. It was concluded that knowledge of breast cancer risk factors and breast self-examination practice need to be promoted among the Jordanian women.

Karayurt O et al 2009 conducted a study to determine the effects of peer and group education on knowledge and beliefs about breast cancer and performance of BSE. They concluded that mean knowledge scores increased after peer education and after group education both. Perceived benefits and confidence related to BSE increased and perceived barriers decreased after both interventions significantly. **Yan YY 2009** explored in the study about knowledge of women regarding breast cancer risk factors. About 70.8% and 77.0% considered a family history of breast cancer and prior history of benign breast problems as risk factors respectively. However, over 40% were unsure of other risk factors including age, early age at menstruation, late age at menopause, childlessness and oral contraceptive use. About 80% regarded breast cancer as a serious illness and 88.7% acknowledged that both mammography and breast self-examination (BSE) could help early detection of the disease. **Wood RY et al 2002** carried out a quasi-experimental study to assess the effect of an educational intervention on promoting breast self-examination. Sample size was 328. The findings of the study showed that intervention was effective in increasing knowledge about breast cancer risk and screening and Breast self-examination proficiency in the sample. The conclusion of the study suggested that educational interventions should be designed specifically for age and race sensitivity to enhance cancer screening with vulnerable populations.

TITLE OF THE STUDY

Association of pre-test knowledge score regarding Breast Self-Examination with selected Socio Demographic variables in selected hospitals of Patiala.

OBJECTIVES

To find out the association of pre-test knowledge score regarding Breast Self- Examination among the nurses in selected hospitals of Patiala

METHODOLOGY

The research approach for this study was quasi-experimental. . This approach involves manipulation but lacks at least one of the other two properties of true experiment i.e. randomization or control. The present study lacks control. Attempt has been made to assess the effectiveness of structured teaching programme on Breast Self-

Examination among the nurses. The independent variables included in the study were Age (in years), Education, Marital Status, No. of children, previous knowledge of Breast Self-Exams, Already Practicing Breast Self-Exams and source of information and Structured Teaching Programme on breast self-examination. The dependent variable was knowledge score regarding Breast Self-Examination among the nurses. Investigator selected a sample of 500 nurses by using convenient sampling technique

RESULTS

Table 1: Relationship of Pre and Post test Mean Knowledge Score Regarding Breast Self-Examination among the Nurses with their age. N=500

Knowledge Score		Pretest		Posttest		df	‘t’
Age (in years)	n	Mean	SD	Mean	SD		
20-30	98	20.48	5.862	31.11	4.590	97	17.714**
31-40	220	17.13	5.924	31.69	3.943	219	30.192**
41-50	116	18.62	5.353	31.44	4.453	115	24.557**
51& above	66	17.96	5.279	30.39	3.499	65	16.941**
		df	F				
Between group		3					
Within group		496	9.365**				

Table 1 illustrate that highest (20.48) pretest mean knowledge score was scored by nurses in age group 20-30 years followed by (18.62) age group 41-50 years, (17.96) 51 & above and (17.13)31-40years . Post test mean knowledge score of nurses in all age group 31-40, 41-50, 20- 30,51& above was nearly same(31.69,31.44, 31.11, 30.39 respectively). The difference between pre test and post test mean knowledge score was found statistically significant at $p<0.01$ level by ‘t’ test. The relationship of pre test and post test mean knowledge Score among the nurses according to age was found statistically significant at $p<0.01$ level by ANOVA.

Hence, it was inferred that age had impact on knowledge score among nurses and there was a definite impact of structured teaching programme regarding Breast Self-Examination on knowledge among nurses in various age groups.

TABLE 2

Relationship of Pre and Post test Mean Knowledge Score Regarding Breast Self-Examination among the Nurses with level of education N =500.

Knowledge Score		Pretest		Posttest		df	‘t’
Education	N	Mean	SD	Mean	SD		
Diploma	311	18.33	4.590	34	3.225	310	9.289**
Graduation	157	15.87	5.356	31.92	4.226	156	31.085**
Post- Graduation	29	19.36	5.917	31.16	4.188	28	32.036**
Ph.D.	03	16.33	4.619	29.67	0.577	02	5.714**
		df	F				
Between group		3					
Within group		496	11.142**				

Table 2 reveal that in pretest highest (19.36) mean knowledge score was obtained by nurses who did post-graduation, followed by diploma holder, Ph.D. nurses and graduate nurses (18.33, 16.33 and 15.87). In post test highest (34) mean knowledge score was of nurses who were diploma holder followed by graduate, post graduate and Ph.D. nurses (31.92, 31.16, 29.67). The difference between pre test and post test mean knowledge score was found statistically significant at $p<0.01$ level by ‘t’ test.

The relationship of pre test and post test mean knowledge Score among the nurses according to education was found statistically significant at $p<0.01$ level by ANOVA.

Hence, it was inferred that education had impact on knowledge score among nurses and there was a definite impact of structured teaching programme regarding Breast Self-Examination on knowledge among nurses.

TABLE 3

Relationship of Pre and Post test Mean Knowledge Score Regarding Breast SelfExamination among the Nurses with their Marital Status. N=500

Knowledge Score							
Marital Status	n	Pretest		Posttest		df	't'
		Mean	SD	Mean	SD		
Married	390	A 18.36	5.819	A' 31.32	4.348	389	39.529**
Unmarried	110	B 18.11	5.921	B' 31.54	3.278	109	19.455**
		df		't'			
A ,A',B,B'(Gain Score)		498		0.612NS			

NS: Non-significant ** : Significant at $p < 0.01$

Table 3 and depict that in pretest both married and unmarried nurses obtained nearly same mean knowledge score (18.36 and 18.11 respectively). Also in posttest both unmarried and married nurses obtained nearly same mean knowledge score (31.54 and 31.32 respectively). The difference between pre test and post test mean knowledge score was found statistically significant at $p < 0.01$ level by 't' test.

The relationship of pre test and post test mean knowledge Score among the nurses according to marital status was found statistically non-significant at $p < 0.05$ level by 't' test. Hence, it was inferred that marital status had no impact on knowledge score among nurses but there was a definite impact of structured teaching programme regarding Breast Self-Examination on knowledge among nurses.

TABLE 4

Relationship of Pre and Post test Mean Knowledge Score Regarding Breast SelfExamination among the Nurses with No. of Children N=500

Knowledge Score							
No. of Children	n	Pretest		Posttest		df	't'
		Mean	SD	Mean	SD		
None	72	18.12	4.77	30.06	5.842	71	12.073**
One	150	18.72	6.020	31.22	4.450	149	21.502**
Two	204	18.31	6.078	31.70	3.864	203	28.555**
Three or more	74	17.25	4.276	31	4.394	73	13.455**
		df		F			
Between group		3					
Within group		496		0.962NS			

Table 4 depict that the nurses who had no child, one child, two children scored nearly same mean knowledge score (18.12, 18.72 and 18.31 respectively) and nurses with three or more children scored minimum mean knowledge score (17.25) in pretest. The nurses who had no child, one child, two children scored nearly same mean knowledge score (18.12, 18.72 and 18.31 respectively) and nurses with three or more children scored minimum mean knowledge score (17.25) in pretest. The difference between pre test and post test mean knowledge score was found statistically significant at $p < 0.01$ level by 't' test.

The relationship of pre test and post test mean knowledge Score among the nurses according to No. of children was found statistically non-significant at $p < 0.05$ level by ANOVA. Hence, it was inferred that No. of children had no impact on knowledge score among nurses but there was a definite impact of structured teaching programme regarding Breast Self-Examination on knowledge among nurses.

TABLE 5

Relationship of Pre and Post test Mean Knowledge Score Regarding Breast Self-Examination among the Nurses with their Previous Knowledge Regarding Breast Self- Exams N= 500

Knowledge Score		Pretest		Posttest		df	't'
Previous knowledge regarding breast self-exams	n	Mean	SD	Mean	SD		
Yes	342	A19.71	5.160	A'31.66	3.784	341	29.670***
No	158	B17.41	6.070	B'31.16	4.412	157	33.809***
		Df	't'				
A,A',B,B' (Gain Score)		498	2.994**				

Table 5 reveal that in pretest nurses who had previous knowledge of breast self-exams obtained higher mean knowledge score (19.71) than (17.41) those who had no previous knowledge regarding breast self-exams. But in posttest both the groups had nearly same mean knowledge score (31.66 and 31.16). The difference between pre test and post test mean knowledge score was found statistically significant at $p < 0.01$ level by 't' test.

The relationship of pre test and post test mean knowledge score among the nurses according to previous knowledge regarding breast self- exams was found statistically significant at $p < 0.05$ level by 't' test.

Hence, it was concluded that previous knowledge regarding breast self-exams had impact on knowledge score among nurses but there was a definite impact of structured teaching programme regarding Breast Self-Examination on knowledge among nurses.

TABLE 6

Relationship of Pre and Post test Mean Knowledge Score Regarding Breast Self Examination among the Nurses with their previous practice of BSE N=500

Knowledge Score		Pretest		Posttest		df	't'
Already Practicing Breast Self-Exams	n	Mean	SD	Mean	SD		
Yes	104	A19.25	5.365	A'32.62	4.658	103	8.921**
No	238	B19.73	5.167	B'31.61	3.743	237	28.495**
		Df	't'				
A,A',B,B' (Gain Score)		340	0.817NS				

Table 6 elicit that in pretest nurses who were already practicing breast self-exams and who were not practicing breast self-exams obtained nearly equal mean knowledge score (19.25 and 19.73). But in posttest nurses who were already practicing breast self-exams scored (32.62) more than (31.61) that were not practicing breast self-exams. The difference between pre test and post test mean knowledge score was found statistically significant at $p < 0.01$ level by 't' test.

The relationship of pre test and post test mean knowledge score among the nurses according to already practicing breast self-exams was found statistically non-significant at $p < 0.05$ level by 't' test.

Hence, it was concluded that already practicing breast self-exams had no impact on knowledge score among nurses but there was a definite impact of structured teaching programme regarding Breast Self-Examination on knowledge among nurses.

Table 7

Relationship of Pre and Post test Mean Knowledge Score Regarding Breast SelfExamination among the Nurses with Source of Information. N=500

Knowledge Score								
Source of Information	of	n	Pretest		Posttest		df	't'
			Mean	SD	Mean	SD		
T.V	39		20.12	4.420	31.94	3.162	38	20.092**
Newspaper	111		19.61	5.331	31.35	4.018	110	12.772**
Health Personnels	82		19.57	6.344	31.17	3.854	81	12.601**
Internet	110		19.62	4.574	32.16	3.931	109	18.578**
			Df		F			
Between group			3		0.285NS			
Within group			338					

Table 7 and show that the nurses who got information from T.V obtained highest (20.12) mean knowledge score followed by nurses who got information from Internet, newspaper and health personnel (19.62, 19.61 and 19.57 respectively) in pretest. But in post test nurses who got information from internet obtained highest (32.16) mean knowledge score followed by nurses who got information from T.V, newspaper and health personnel (31.94, 31.35 and 31.17) respectively. The difference between pre test and post test mean knowledge score was found statistically significant at $p < 0.01$ level by 't' test.

The relationship of pre test and post test mean knowledge Score among the nurses according to source of information was found statistically non-significant at $p < 0.05$ level by ANOVA.

Hence, it was concluded that source of information had no impact on knowledge score among nurses but there was a definite impact of structured teaching programme regarding Breast Self-Examination on knowledge among nurses.

MAJOR FINDINGS

According to age maximum 42.5% nurses belonged to age group 31-40 years and minimum 11.5% to age group 51 & above. According to education maximum 65.2% nurses were post graduates and negligible number i.e. 0.8% was Ph.D. As per marital status maximum number 82.5% nurses were married and rest of 17.5% was unmarried. Among the married subject 46.7% nurses were having two children and minimum 7.3% had no child. According to previous knowledge of Breast self-exams maximum 60.5% nurses had previous knowledge of Breast self-exams and 39.5% had no previous knowledge of Breast self-exams. Among these 342 who has little bit knowledge of breast self-exams maximum 94.9% nurses were not practicing breast self-exams and only 5.1% told that they were practicing breast self-exams but not regularly. Maximum number 29.1% got this knowledge from newspaper and minimum 20.3% from TV, whereas other got this information from health personnel's and internet.

Majority 49% and 38% of study subject had average and below average pretest knowledge but 50.5% and 42.5% of study subjects had good and excellent respectively in post test. It shows that structured teaching programme had significant impact on raising the knowledge regarding breast self-examination among nurses.

Highest (20.48) pretest mean knowledge score among the nurses in age group 20-30 years and least (17.13) in age group 31-40 years. Posttest mean knowledge score of nurses in all age group 31-40, 41-50, 20-30, 51 & above was almost similar (31.69, 31.44, 31.11, 30.39 respectively). It was inferred that age had no impact on knowledge score among nurses.

In pretest highest (19.36) mean knowledge score was obtained by nurses who were post graduate and least (15.87) by graduate nurses. In post test highest (34) mean knowledge score was among diploma holder and least by 929.67 Ph.D. nurses. It was inferred that diploma holders were keen interested to listen the STP than Ph.Ds. who were negligible in number. In both married and unmarried nurses obtained nearly same mean knowledge score (18.36 and 18.11 respectively) in pretest and Post test (31.54 and 31.32 respectively). It was inferred that marital status had no impact on knowledge score among the nurses.

Regarding number of children the nurses without children and with one or two children scored almost same mean scores (18.12, 18.72, and 18.31 respectively) in pre test and (17.25) mean score by the nurses with three or more children. It was inferred that the number of children had no impact on knowledge score of nurses.

Among 158 subjects who had previous knowledge of breast self-examination obtained higher mean knowledge

score (19.71) than (17.41) those who had no previous knowledge regarding breast self-examination. But in posttest both the groups had nearly same mean knowledge score (31.66 and 31.16). It was concluded that previous knowledge regarding breast self-exams had impact on knowledge score among nurses.

In pretest nurses who were already practicing breast self-exams and who were not practicing breast self-exams obtained nearly equal mean knowledge score (19.25 and 19.73 respectively). And nearly same mean score was obtained by both the groups (32.62) more than (31.61) in post test. It was concluded that there is no impact of STP already practicing breast self-exams.

The nurses who got information from T.V obtained highest (20.12) in pretest and who got information from internet obtained highest (32.16) mean knowledge score in post test. Thenurses who got information from health personnel obtained least mean score (19.57 and 3.17) in pre and posttest respectively. It was concluded that source of information had no impact on knowledge score among nurses.

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